

DMX Channel Selection (DMX Protocol)

Channel	Function	Time and Value	DMX	HEX	%
1) PAN-coarse	0 .. 360°	min. 1/5min. max. 4/sec.	0..255	00..FF	0..100
2) PAN-fine	High- Pos ... High- Pos (16 Bit)		0..255	00..FF	0..100
3) Tilt-coarse	0 .. 360°	min. 1/5min. max. 4/sec.	0..255	00..FF	0..100
4) Tilt-fine	High- Pos ... High- Pos (16 Bit)		0..255	00..FF	0..100
5) Pan-Rotation	static, positioning with channel 1 and 2		0..1	0..1	1
	CW, slow - fast		2..127	2..7F	2..49
	CCW, fast - slow		128..255	80..FF	50..100
6) Tilt-Rotation	static, positioning with channel 3 and 4		0..1	0..1	1
	CW, slow - fast		2..127	2..7F	2..49
	CCW, fast - slow		128..255	80..FF	50..100
7) Color	open		0..1	00..01	0,2
	open / color 1		2..3	02..03	1,0
	color 1		4..5	04..05	1,8
	color 1 / color 2		6..7	06..07	2,5
	color 2		8..9	08..09	3,3
	color 2 / color 3		10..11	0A..0B	4,1
	color 3		12..13	0C..0D	4,9
	color 3 / color 4		14..15	0E..0F	5,7
	color 4		16..17	10..11	6,5
	color 4 / color 5		18..19	12..13	7,3
	color 5		20..21	14..15	8,0
	color 5 / color 6		22..23	16..17	8,8
	color 6		24..25	18..19	9,6
	color 6 / color 7		26..27	1A..1B	10,4
	color 7		28..29	1C..1D	11,2
	color 7 / color 8		30..31	1E..1F	12,0
	color 8		32..33	20..21	12,7
	color 8 / color 9		34..35	22..23	13,5
	color 9		36..37	24..25	14,3
	color 9 / color 10		38..39	26..27	15,1
	color 10		40..41	28..29	15,9
	color 10 / color 11		42..43	2A..2B	16,7
	color 11		44..45	2C..2D	17,5
	color 11 / color 12		46..47	2E..2F	18,2
	color 12		48..49	30..31	19,0
	color 12 / color 13		50..51	32..33	19,8
	color 13		52..53	34..35	20,6
	color 13 / color 14		54..55	36..37	21,4
	color 14		56..57	38..39	22,2
	color 14 / color 15		58..59	3A..3B	22,9
	color 15		60..61	3C..3D	23,7
	color 15 / color 16		62..63	3E..3F	24,5
	color 16		64..65	40..41	25,3
	color 16 / color 17		66..67	42..43	26,1
	color 17		68..69	44..45	26,9
	color 17 / color 18		70..71	46..47	27,6
	color 18		72..73	48..49	28,4
	color 18 / color 19		74..75	4A..4B	29,2
	color 19		76..77	4C..4D	30,0
	color 19 / open		78..79	3E..4F	30,8

Channel	Function			Time and Value	DMX	HEX	%
	open				80..127	50..7F	32..49
	color rotation, slow-fast, CW			min. 1 turn/5 sec.	128..191	80..BF	50..75
	color rotation, fast-slow, CCW			max. 1 turn/sec.	192..253	C0..FD	76..98
	Audio color chaser slow			each 4 th sound impulse → new color	254	DE	99
	Audio color chaser fast			each sound impulse → new color	255	FF	100
6) Gobo	open				0..3	0..3	0,8
	Gobo 1				4..7	4..7	2,0
	Gobo 2				8..11	8..0B	3,8
	Gobo 3				12..15	0C..0F	5,0
	Gobo 4				16..19	10..13	7,0
	Gobo 5				20..23	14..17	8,4
	Gobo 6				24..27	18..1B	10
	Gobo 7				28..31	1C..1F	11
	Gobo 8				32..35	20..23	13
	Gobo 9				36..39	24..27	14,5
	Gobo 10				40..43	28..2B	16,2
	Gobo 11				44..47	2C..2F	17
	Gobo 12				48..51	30..33	19
	Gobo 13				52..55	34..37	20,8
	Gobo 14				56..59	38..3B	22,4
	Gobo 15				60..63	3C..3F	24,3
	Gobo 16				64..67	40..43	25,5
	Gobo 17				68..71	44..47	27,5
	Gobo 18				72..75	48..4B	29
	Gobo 19				76..79	4C..4C	30,5
	open				80..127	50..7F	32..49
	Gobo rotation, slow-fast, CW			min. 1 turn/5 sec.	128..191	80..BF	50..75
	Gobo rotation, fast-slow, CCW			max. 1 turn/sec.	192..253	C0..FD	76..98
	Audio Gobo chaser slow			each 4 th sound impulse → new Gobo	254	DE	99
	Audio Gobo chaser fast			each sound impulse → new Gobo	255	FF	100
9) Shutter	Shutter closed				0..1	0..1	0,2
	Dimmer, closed - open				2..125	2..7D	0,5..49
	Shutter open				126..127	7E..7F	50..51
	Random Strobe				128..143	80..8F	52..56
	Audio Strobe				144..159	90..9F	57..62
	Strobe, slow - fast				160..239	A0..EF	63..93
	Shutter open				240..255	8C..FF	94..100
	Shutter open (lamp start)				254..255	FE..FF	100
10) Focus	near - far				0..255	0..FF	0..100
11) Speed	Pan/Tilt relative movement				0..1	00..01	0..0,5
	Speed, slow - fast				2..255	02..FF	1..100
12) Move- ment	no movement				0	00	0
	Movement	Size	Phase				
	PAN	1	0°		01..01	01..01	0,5
		1	90°		02..03	02..03	1,0
		1	180°		04..05	04..05	1,7
		1	270°		06..07	06..07	2,5
	PAN	2	0°		08..09	08..09	3,3
		2	90°		10..11	0A..0B	4,1
		2	180°		12..13	0C..0D	4,9

Channel	Function			Time and Value	DMX	HEX	%
	PAN	2	270°		14..15	0E..0F	5,7
		3	0°		16..17	11..11	6,5
		3	90°		18..19	12..13	7,3
		3	180°		20..21	14..15	8,0
		3	270°		22..23	16..17	8,8
	PAN	4	0°		24..25	18..19	9,6
		4	90°		26..27	1A..1B	10,4
		4	180°		28..29	1C..1D	11,2
		4	270°		30..31	1E..1F	12
	TILT		size / phase see also PAN		32..63	20..3F	13..25
	PAN / TILT		size / phase see also PAN		64..95	40..5F	26..37
	PAN / TILT (inverse)		size / phase see also PAN		96..127	60..7F	38..50
	Circle		size / phase see also PAN		128..159	80..9F	51..62
	Circle (inverse)		size / phase see also PAN		160..191	A0..BF	63..75
	lying eight		size / phase see also PAN		192..223	C0..DF	76..87
	random movement		size see also PAN		224..255	E0..FF	88..100
13) Special	n.a.				0..63	0..3F	0..25
	Special color chaser color -> color +1			slow - fast	64..79	40..4C	26..31
	Special color chaser color -> color +2			slow - fast	80..95	50..5F	32..73
	Pan/Tilt, audio-controlled			slow	96..111	60..6F	38..44
	Pan/Tilt, audio-controlled			fast	112..127	70..7F	45..49
	Pan/Tilt, random positioning				128..143	80..8F	50..56
	Lamp off			after 3 sec.	230..249	90..F9	57..97
	Reset			after 3 sec.	250..255	FA..FF	98..100

Lamp ON	Channel 9 Shutter open		254..255	FE..FF	100
Lamp OFF	Channel 13 (Special)	after 3 sec.	230..249	90..F9	57..97
Reset	Channel 13 (Special)	after 3 sec.	250..255	FA..FF	98..100